

Anti-Growth associated protein 43 (GAP-43) Antibody

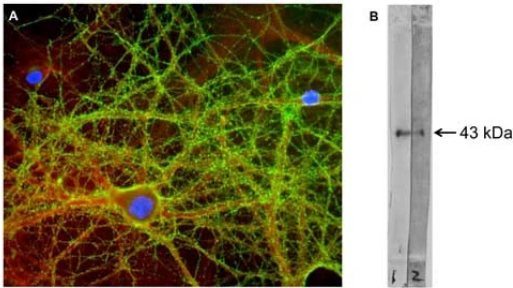


Product Details

Available Variants	100 µL (SKU:C-1649-100)
Conjugate	Unconjugated
Isotype	IgY
Host Species	Chicken
Format	Concentrated purified IgY
Physical State	Lyophilized
Buffer	Lyophilized IgY preparation, with sodium azide.
Applications	ICC, WB
Dilution Ranges	WB: 1:1000-1:5000 ICC: 1:500-1:1000
Species Reactivity	Bovine, Human, Rat
Immunogen	C-terminal peptide 217-227 of rat and mouse GAP43, which is KEDPEADQEHA, to which an N terminal Cysteine residue was added to allow chemical coupling to Keyhole Limpet Hemocyanin carrier protein.
Specificity	The antibody reacts with a 43 kDa band by Western blot on bovine hippocampus lysate. It has also been used successfully for immunocytochemistry. Human, rat and bovine. It is expected that it will work on other mammal tissues due to amino acid sequence similarity.
Molecular Weight	43 kDa
Storage	Spin vial briefly before opening. Reconstitute with 100 µL sterile-filtered, ultrapure water. Centrifuge to remove any insoluble material. Store lyophilized, unopened vial at 2-8°C or lower. After reconstitution, prepare aliquots and store at -20°C to -80°C for a higher stability. Avoid freeze-thaw cycles.
UniProt ID	P07936

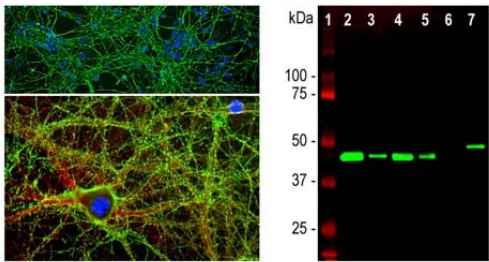
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.

Product Images



A: Immunofluorescence analysis of GAP43 expression (green) in mixed neuron-glia cultures with C-1649-100. GAP43-IR is observed in axons and dendrites, with strong staining of the submembraneous cytoskeleton and vesicles. Cultures were co-labelled with R-1694-100, a rabbit polyclonal antibody to alpha-II-spectrin (red), and a DNA dye (blue).

B: Western blot of cow hippocampus extract. C-1649-100 detects GAP43 at its expected molecular weight of ~43 kDa.



Left: Analysis of GAP43 expression in cortical neuron-glia cell culture from E20 rat by **Immunocytochemistry**. Staining was performed with chicken antibody to GAP43 (1:2,000, green) and rabbit antibody to alpha-II spectrin (R-1694-100, 1:1,000, red). Blue: DAPI nuclear stain. The GAP43 antibody labels protein expressed in the axonal membrane and synapses of neuronal cells, while the spectrin antibody stains the submembraneous cytoskeleton of axons and dendrites.

Right: Western blot analysis of tissue and cell lysates using chicken antibody to GAP43 (1:5,000). [1] protein standard, [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord, [6] C6 cells, [7] SH-SY5Y cells. A single band at 43 kDa corresponds to GAP43. The GAP43 protein is only detected in lysates of neuronal origin. C6 rat glioma cells [6] do not express GAP43.

